Eelgrass and Soft Shoreline Restoration
Chesapeake Bay, MD

Eelgrass (*Zostera marina*) populations along the East Coast of the United States suffered massive declines in the early 1930's due to a naturally occurring wasting disease. Vast meadows of this plant provide habitat for commercially and recreationally important finfish and shellfish species, while providing excellent food for migratory waterfowl. While many regions witnessed a population rebound over subsequent decades, increasing human impacts diminished the natural recovery. In Chesapeake Bay, North America's largest estuary, spatial coverage of all submerged aquatic vegetation species (SAV), including eelgrass, suffered substantial losses. Since the 1980's state and federal efforts to improve water quality have resulted in gradual increases in baywide coverage of SAV. However, many areas such as the lower Potomac River never recovered the eelgrass population it once historically supported, presumably due to a lack of seeds.

The NOAA Community-based Restoration Program (CRP) in partnership with the Alliance for the Chesapeake Bay (ACB), the US Navy, St. Mary's College of Maryland and other partners and community organizations are using state-of-the-art techniques to restore vital eelgrass habitat in the lower Potomac River using volunteers. Two methods are currently used: transplanting of adult plants, and seed collection and dispersal. For a project at US Navy's Webster Field Annex, volunteers collected and transplanted over 5,000 eelgrass plants. This was part of a larger project that combined soft shoreline techniques with offshore oyster reefs serving as breakwaters to reduce wave energy. Beach grasses were also planted along the shoreline to stabilize the re-graded sand beaches. This site is one of many in the lower Potomac being targeted for eelgrass restoration completed by citizen volunteers. Since 2000, over 140 volunteers (many certified SCUBA divers) have assisted in creating essential eelgrass habitat. Initial surveys nine months after planting indicate high survival of plants and expansion of the grass beds. During these surveys, several species of finfish and blue crabs have been observed in the beds. Most importantly, based on the success of this project, other funding sources have pledged support for continuation of this work in 2004-2006.

Since ACB's initial eelgrass restoration work in the lower Potomac began in 1996, over 420 student and community volunteers have contributed 3,360 volunteer hours. NOAA's CRP has provided $41,900 to the initial restoration work, while USGS and the US Navy provided additional federal funding. ACB and other local partners have provided over $120,000 in cash and in-kind services as match.

For more information on these projects contact:

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